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Related Art (56) Nil

The following statement is a full description of this invention, including the best method of performing it known to us:

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THIS INVENTION relates to flooring materials, more particularly to flooring materials in the form of elements, the elements being provided with a textile surface.

It is an object of the invention to provide a floor covering in the form of elements of interlocking form so that when areas are worn or damaged the elements may be removed and replaced, re-arranged or cleaned without having to lift the entire floor covering, whereby costs involved in maintenance may be reduced.

It is another object of the invention to provide a covering which is attractive and decorative for use not only as a floor covering material, but also for use as an acoustic material such as upon walls or ceilings wherein the attachment of such acoustic or decorative surface is substantially simpler than with the conventional rolls or sheet coverings.

Another object of the invention is to provide a suitable covering that is comparatively simple to lay thus bringing the laying of floor coverings within the scope of an average home owner and making it unnecessary for a skilled tradesman to lay the floor covering and consequently reducing the overall cost of producing the floor covering.

Other objects and advantages of the invention will become apparent from the following description which is given by way of example only and with reference to preferred forms of the invention.

According to one aspect of this invention there is provided a textile element having a stiff backing portion provided on at least two opposing edges with engaging means of complementary form, enabling interengagement between adjacent textile elements.

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Other aspects of this invention, which should be considered in all its novel aspects, will be apparent from the following description, which is given by way of example, only, with reference to preferred forms of the invention shown in the drawings in which:-

Fig. 1 shows a cross sectional view along A-A of Fig. 2 of one form of textile element of the invention,

Fig. 2 shows a plan view of the element shown in Fig. 1, and

Fig. 3 shows a cross section through a further form of textile element of the invention.

In the preferred form of the invention, the textile element as shown in Figs. 1 and 2 is indicated by arrow 1 and comprises a stiff rectangular backing portion or member 2 preferably constructed of a pressed wooden fibre material. However any suitable stiff material, either rigid or semi-rigid may be used such as plastics, impregnated fibre, expanded foam plastics, polyurathane, polystyrene, rubber and paravox materials. The rectangular backing member 2 is formed preferably as an oblong or square element of a size which is easy to pack and carry, such as for example one foot square element or one foot by two feet element. The backing member 2 has a textile wearing surface 3 adhered to one surface 2a which surface 3 is preferably of a woven fibre material. However any suitable material may be used such as tufted fibre material, a pressed laminate, a spun and bonded material, a needle-punched material, a Rochelle knitted material or a traditionally knitted or flocked material. However, the

invention is particularly suited for use in conjunction with a tufted carpet material. Edges 4 of the backing member 2 of the textile element 1 are adapted on at least two edges, preferably edges 4 of the backing member 2 to engage with textile elements 1 of the same construction. Preferably two adjacent edges of the textile element 1 shown in Fig. 2 and marked "X" and "Y" are provided with engaging means as shown in the cross section in Fig. 1. The edges 4 marked X have a tongue 5 flanked by two recesses 6a and 6b, recess 6a being of a depth substantially greater than the depth of recess 6b and recess 6a being provided adjacent the surface 2a to which the textile wearing surface 3 is attached and the shorter recess 6b being adjacent the surface 2b normally provided to allow attachment to a floor. The adjacent edges 4 marked Y are provided with a substantially complementary shape to that of the edges 4 marked X in the backing member 2. The backing member 2 on the edges 4 marked X are provided with a groove 7 flanked by shoulders 8a and 8b, shoulder 8a extending to a greater width than that of 8b substantially complementary to the recesses 6a and 6b on the edges 4 marked Y of the backing member 2.

When laying the elements on a floor, the textile elements 1 are arranged upon a floor 11 and fixed by fixing means such as nails, staples, adhesive and the like securing the textile elements to the floor and/or adjacent textile element 1. The textile elements 1 may be laid in the conventional manner for other types of floor tiles, namely beginning from a wall or like obstacle in the floor, the first textile element 1 being laid upon the surface of the floor 11 and subsequent textile elements 1 being fitted to their edges 4

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and interlocking with the edges 4 of the textile elements 1 or other textile elements 1 already upon the floor so that the edges 4 marked X interlock with the edges 4 marked Y of another textile element and are thus held upon the floor 11 by the fixing means and the interlocking of the X and Y edges 4 of the backing members 2 of the textile elements 1. Thus, the interlocking of the edges X and Y aligns the textile elements 1 in true lateral register and also, prevents uplifting.

As shown in Fig. 3, in a further embodiment, the textile element 1 may be formed laminated such as by layers of a pressed woollen fibre or other suitable material having a textile surface 3 and having part thereof hardened or stiffened by a settable compound such as epoxy resin or the like as indicated in the cross hatched area 9 to form the backing portion, the hardened part extending to the interlocking edges 4, marked X and Y as hereinbefore described.

Thus, according to this invention, there is provided a floor covering material in the form of textile elements, the textile elements being arranged so that they will interlock with one another to provide a floor covering.

Although this invention has been described with reference to a preferred embodiment, it is to be understood that the invention is not limited thereto and modifications may be made without departing from the scope of the invention as set forth in the appended claims.

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A textile element having a stiff backing portion, is provided on at least two opposing sides thereof with engaging means of complementary form enabling inter-engagement between adjacent textile elements.
2. A textile element as claimed in Claim 1, wherein the backing portion is formed as a separate portion having a textile covering adhered to one surface thereof.
3. A textile element as claimed in Claim 1 or as claimed in Claim 2 wherein the backing portion is rigid or semi-rigid.
4. A textile element as claimed in Claim 1 which is formed of laminated textile layers, a part of which is thickened or hardened by impregnation with a settable compound to form the backing portion.
5. A textile element as claimed in any one of the preceding claims wherein said engaging means of the textile element is provided in the form of a tongue and groove arrangement.
6. A textile element as claimed in Claim 5, wherein the tongue and groove arrangement on one edge comprises recesses of unequal depth flanking a tongue, said arrangement on the opposing edge being formed with complementary shoulders flanking a complementary groove.
7. A textile element as claimed in any one of the preceding claims, wherein the textile is a carpet material.

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8. A method of covering a surface comprising the steps of suitably placing on a surface a textile element having a backing portion and complementary engaging means of at least two opposed edges, attaching such textile element to the surface, placing the engaging means of one edge of a second textile element in engagement with the complementary engaging means of the first textile element and fixing the second textile element to the surface.
9. A textile element as hereinbefore described with reference to Fig. 1 of the accompanying drawings.
10. A textile element as hereinbefore described with reference to Fig. 2 of the accompanying drawings.
11. A method of providing a floor covering as hereinbefore described with reference to Fig. 1 of the accompanying drawings.
12. A method of providing a floor covering as hereinbefore described with reference to Fig. 2 of the accompanying drawings.
13. The parts, elements, steps and features referred to or indicated in the specification and/or claims and/or drawings of this application, individually or collectively, and any and all combinations of any two or more of said parts, elements, steps or features.

Dated this 6th day of April, 1972.

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